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EXAMINER

HUNTSINGER, PETER K

ART UNIT	PAPER NUMBER
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2624

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DATE MAILED: 10/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/681,208

Applicant(s)

FERLITSCH ET AL.

Examiner

Peter K. Huntsinger

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 7-9, and 14-19 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2-9.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 4, 5, 7-9, and 14-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is no antecedent basis in claim 4 and 5 for "said prompting." The examiner suggests "the method of claim 2" should instead read "the method of claim 3."

There is no antecedent basis in claim 7-9 for "said dividing." The examiner suggests "the method of claim 5" should instead read "the method of claim 6."

There is no antecedent basis in claim 14-19 for "said interface." The examiner suggests "the print processor of claim 11" should instead read "the print processor of claim 13."

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 21 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 21 is non-statutory subject matter because it fails to produce a useful, concrete, and tangible result. According to MPEP section 2106, "If the "acts" of a claimed process manipulate only numbers, abstract concepts or ideas, or signals representing any of the foregoing, the acts are not being applied to appropriate subject matter." The computer data signal, print task, print task modifications, and print processor can all be represented as software consisting of binary numbers.

Further, according to MPEP section 2106, "Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory." Claim 21 does not specify a computer-readable media for the computer data signal.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7, 10, 13, and 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owa et al.

Referring to claim 1, Owa et al. discloses: a method for distributing a print task among multiple printers, said method comprising the acts of: sending a print task to a print processor (drawing instruction from GDI 42, Col. 9, lines 45-49); sending print task modification commands to said print processor (S3, Col. 5, lines 34-41); and modifying said print task with said print processor (Col. 9, lines 50-60, the modifying of the image for the specific printer being used). While Owa et al. does not expressly disclose a "print processor" that receives a print task and modifications, and modifies the print task, Owa et al. does disclose a printer driver or other software performing all these actions (Col. 3, lines 24-37). The applicant does not specify in the claims whether the print processor consists solely of software or a combination of software and hardware, but the software disclosed by Owa et al. performs equivalently to the applicant's print processor software.

Referring to claim 2, Owa et al. discloses "the method of claim 1 wherein said sending said print task modification commands comprises reading command data from a configuration file" (basic information setting section 12, Col. 3, lines 52-65). Owa et al. discloses that the basic information setting section 12 can be provided as software

separate from the printer driver (Col. 3, lines 35-38) and that when selecting an output destination printer (modifying the print task), the output destination printer selection section 11 references information from the basic information setting section 12 (Col. 3, lines 45-51).

Referring to claim 3 Owa et al. discloses "the method of claim 1 further comprising the act of prompting a user for print task modification commands" (user print condition input section 14, Col. 4, lines 18-20). Owa et al. clearly states that the user inputs print conditions.

Referring to claim 4 Owa et al. discloses "the method of claim 2 wherein said prompting is print-processor based" (user print condition input section 14, Col. 3, lines 24-35). While Owa et al. discloses the prompting provided by the printer driver, the software designated as from the printer driver performs equivalently to the applicant's software designated as from the print processor.

Referring to claim 5, Owa et al. discloses "the method of claim 2 wherein said prompting is driver-based" (user print condition input section 14, Col. 3, lines 24-35). Owa et al. clearly states that the user print condition input section 14 can be provided by software referred to as the printer driver.

Referring to claim 6, Owa et al. discloses "the method of claim 1 wherein said modification comprises dividing said print task into multiple modified print tasks" (S45, Col.12, lines 51-53). Owa et al. states that a print task can be divided by each page in the print task.

Referring to claim 7, Owa et al. discloses "the method of claim 5 wherein said dividing comprises job splitting" (S45, Col.12, lines 51-53). Again, Owa et al. states that a print task can be divided by each page in the print task.

Referring to claim 10, Owa et al. discloses "the method of claim 1 wherein said modifying comprises dividing said print task into multiple modified print tasks and further comprising the act of distributing said multiple modified print tasks to a plurality of printing devices" (S81-S87, Col. 14-15, lines 55-67, 1-14). Owa et al. presents print data being generated to each selected printer according to modifications.

Referring to claim 13, Owa et al. discloses "a print processor capable of modifying a print task according to print task modification commands (S3, Col. 5, lines 34-41), said print processor comprising: an input for receiving a print task (drawing instruction from GDI 42, Col. 9, lines 45-49); an interface for receiving a print task modification command (user print condition input section 14, Col. 4, lines 18-20); and an output for sending at least one modified print task" (print data, Col.9, lines 61-63). Again, the software disclosed by Owa et al. performs equivalently to the applicant's print processor software.

Referring to claim 14, Owa et al. discloses "the print processor of claim 11 wherein said interface receives print task modification commands (S42, Col.12, lines 28-34) independently of said input for receiving a print task" (S41, Col. 12, lines 35-44). Owa states that during S41, a document print command is entered and the document is received and analyzed according to functions preformed by the printer driver. During S42, the user-entered modifications as shown in Fig. 12a are received and analyzed.

Referring to claim 15, Owa et al. discloses "the print processor of claim 11 wherein said interface is a dialog box" (Fig 12a and 12b, Col. 12, lines 37-49). Owa clearly states that the user can activate buttons to select instructions for speed or quality. While the reference does not use the term "dialog box", it is clear that the screens in Fig 12a and 12b satisfy the limitation.

Referring to claim 16, Owa et al. discloses "the print processor of claim 11 wherein said interface prompts a user for job splitting parameters" (Fig 12b, Col. 12-13, lines 61-67, 1-4). Owa et al. presents a user interface capable of selecting a printer and approving or canceling the printer according to the splitting of a print job.

Referring to claim 19, Owa et al. discloses "the print processor of claim 11 wherein said interface prompts a user for multiple printer selection" (Fig. 12b, Col 12-13, lines 61-67, 1-4). Owa et al. presents a user interface capable of selecting printers and approving or canceling each printer according to the splitting of a print job.

Referring to claim 20, Owa et al. discloses "a computer readable medium (Col. 17, lines 59-67) comprising instructions for modifying a print task with a print processor, said instructions comprising the acts of sending a print task to a print processor (drawing instruction from GDI 42, Col. 9, lines 45-49); sending print task modification commands to said print processor (S3, Col. 5, lines 34-41); and modifying said print task with said print processor" (Col. 9, lines 50-60). Again, the software disclosed by Owa et al. performs equivalently to the applicant's print processor software. It is clearly stated by Owa et al., that all programs and data according to the invention can be embodied in a physical recording medium loaded into a computer.

Referring to claim 21, Owa et al. discloses "a computer data signal embodied in an electronic transmission (Col. 17, lines 59-67), said signal having the function of modifying a print task with a print processor, said signal comprising instructions for: sending a print task to a print processor (drawing instruction from GDI 42, Col. 9, lines 45-49); sending print task modification commands to said print processor (S3, Col. 5, lines 34-41); and modifying said print task with said print processor" (Col. 9, lines 50-60). According to the Federal Standard 1037C Glossary of Telecommunications Terms, a signal is defined as: Operationally, a type of message, the text of which consists of one or more letters, words, characters, signal flags, visual displays, or special sounds, with prearranged meaning and which is conveyed or transmitted by visual, acoustical, or electrical means. A computer program modifying a print task is equivalent to a computer data signal modifying a print task which is disclosed by Owa et al. Again, the software disclosed by Owa et al. performs equivalently to the applicant's print processor software.

Referring to claim 22, Owa et al. discloses "a method for modifying a print task with a print processor, said method comprising the acts of: sending a print task to a driver (drawing instruction from GDI 42, Col. 9, lines 45-49); prompting a user for print task modification commands (user print condition input section 14, Col. 4, lines 18-20); creating a spool file for said print task (print data, Col. 9, lines 45-49); sending said spool file to a spooler (print request router 46, Col. 9-10, lines 61-67, 1-4); spooling said spool file to a modifying print processor (network printer provider 48, Col. 10, lines 3-13); modifying said print task according to said print task modification commands

thereby creating at least one modified print task (Col. 9, lines 50-60); sending said at least one modified print task to at least one printing device" (print data, Col. 9-10, lines 61-67, 1-18). Owa et al. presents that the print data is generated from the print driver and the print request router stores this print data in a spool file. While it is not explicitly stated, the reference does indicate that the spool file is created between the components of the print driver and print request router, which implies that the print data generated by the print driver is a spool file. The print request router of Owa et al. stores print data and transfers the print data when it is time to print. This function is identical to the function of a spooler, and these components are equivalent. The print request router of Owa et al. then transfers the spool file to a network print processor which modifies a print task based off the supplied network address. . Again, the software disclosed by Owa et al. performs equivalently to the applicant's print processor software.

Referring to claim 23, Owa et al. discloses " a method for distributing a print task to multiple printing devices with a print processor, said method comprising the acts of: generating a print task from an application (application program, Col. 9, lines 38-44), said print task being configured for printing on a single printing device (document 30, Col. 8, lines 52-56); invoking a print driver for combining device initialization and environment data for said single printing device and print task data from said application and creating a spool file (print data Col. 9, lines 45-65); obtaining cluster printing data (user print condition input section 14, Col. 4, lines 18-20); sending said spool file to a spooler (print request router 46, Col. 9-10, lines 61-67, 1-4); spooling said spool file to a

cluster-enabled print processor (CPP) (network printer provider 48, Col. 10, lines 3-13); modifying said spool file data with said CPP to cause said print task to be distributed to multiple printing devices thereby creating at least one modified print task (Col. 9, lines 50-60); and sending said at least one modified print task to said multiple printing devices" (print data, Col. 9-10, lines 61-67, 1-18). The document disclosed by Owa et al. is a print task consisting of no modifications and is not split into print jobs. Loading of the execution modules into memory preformed by the core driver of Owa et al. is interpreted to encompass device initialization for the single printing device. Owa et al. presents that the print data is generated from the print driver and the print request router stores this print data in a spool file. While it is not explicitly stated, the reference does indicate that the spool file is created between the components of the print driver and print request router, which implies that the print data generated by the print driver is a spool file. The print request router of Owa et al. stores print data and transfers the print data when it is time to print. This function is identical to the function of a spooler, and these components are equivalent. The print request router of Owa et al. then transfers the spool file to a network print processor which modifies a print task based off the supplied network address. Again, the software disclosed by Owa et al. performs equivalently to the applicant's print processor software.

4. Claims 8, 9, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owa et al. as applied to claim 5 above, and further in view of Shimada.

Owa et al. discloses "the method of claim 1 wherein said modification comprises dividing said print task into multiple modified print tasks (S45, Col.12, lines 51-53)."

Owa et al. does not expressly disclose "wherein said dividing comprises copy splitting."

Shimada discloses dividing of a print task comprising copy splitting (Col. 9, lines 40-60).

Shimada gives an example of dividing a print task consisting of four copies into four print tasks for three printers. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to allow print tasks for the printer system of Owa et al. to be split among a plurality of printers according to each copy. One of ordinary skill in the art would have been motivated to do this to decrease the required time needed to print multiple copies of a print task without the added expense of purchasing a faster printer.

Referring to claim 9, Owa et al. discloses "the method of claim 1 wherein said modification comprises dividing said print task into multiple modified print tasks (S45, Col.12, lines 51-53)" and "the method of claim 5 wherein said dividing comprises job splitting" (S45, Col.12, lines 51-53). Owa et al. does not expressly disclose "the method of claim 5 wherein said dividing comprises a combination of copy splitting and job splitting." Shimada discloses dividing of a print task comprising copy splitting (Col. 9, lines 40-60). Shimada gives an example of dividing a print task consisting of four copies into four print tasks for three printers. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to allow print tasks for the printer system of Owa et al to be split among a plurality of printers according to copies or print jobs. One of ordinary skill in the art would have been motivated to do

this to decrease the required time needed to print copies or print jobs of a print task without the added expense of purchasing a faster printer.

Referring to claim 17, Owa et al. discloses "a print processor capable of modifying a print task according to print task modification commands (S3, Col. 5, lines 34-41), said print processor comprising: an input for receiving a print task (drawing instruction from GDI 42, Col. 9, lines 45-49); an interface for receiving a print task modification command (user print condition input section 14, Col. 4, lines 18-20); and an output for sending at least one modified print task" (print data, Col.9, lines 61-63). Owa et al. does not expressly disclose "the print processor of claim 11 wherein said interface prompts a user for copy splitting parameters." Shimada discloses an interface prompting a user for copy splitting parameters (Col. 7, lines 57-65). Shimada presents an interface that allows the number of copies and whether each copy is performed sequentially to be entered. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to allow copy splitting parameters to be entered via an interface. One of ordinary skill in the art would have been motivated to do this to allow the user the option of either decreasing the printing time multiple copies would take, or giving the convenience of receiving all copies from one printer.

Referring to claim 18, Owa et al. discloses "a print processor capable of modifying a print task according to print task modification commands (S3, Col. 5, lines 34-41), said print processor comprising: an input for receiving a print task (drawing instruction from GDI 42, Col. 9, lines 45-49); an interface for receiving a print task modification command (user print condition input section 14, Col. 4, lines 18-20); and an

output for sending at least one modified print task (print data, Col.9, lines 61-63)” and “the print processor of claim 11 wherein said interface prompts a user for job splitting parameters” (Fig 12b, Col. 12-13, lines 61-67, 1-4). Owa et al. does not expressly disclose “the print processor of claim 11 wherein said interface prompts a user for copy splitting and job splitting parameters.” Shimada discloses an interface prompting a user for copy splitting parameters (Col. 7, lines 57-65). Shimada presents an interface that allows the number of copies and whether each copy is performed sequentially to be entered. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to allow copy splitting parameters and job splitting parameters to be entered via an interface. One of ordinary skill in the art would have been motivated to do this to allow the user the option of either decreasing the printing time multiple print jobs or copies would take, or giving the convenience of receiving all the papers from one printer.

5. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owa et al. as applied to claim 1 above, and further in view of Onuma.

Owa et al discloses “a method for distributing a print task among multiple printers, said method comprising the acts of: sending a print task to a print processor (drawing instructions from GDI 42, Col. 9, lines 45-49); sending print task modification commands to said print processor (S3, Col. 5, lines 34-41); and modifying said print task with said print processor” (Col. 9, lines 50-60). Owa et al. does not expressly disclose “the method of claim 1 wherein said print task is a printer-ready file” because

Owa et al. does not specify a particular file type for print tasks. Onuma discloses a print task consisting of a printer-ready file (RAW file, Col. 6, lines 6-9). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate the print task of Owa et al. as a printer-ready file. One of ordinary skill in the art would have been motivated to do this because the printer-ready file, or a RAW file, was a standard format available for print tasks at the time this invention was made and data sent to a printer for printing needs to be in a format suitable for printing.

Referring to claim 12, Owa et al discloses “a method for distributing a print task among multiple printers, said method comprising the acts of: sending a print task to a print processor (drawing instructions from GDI 42, Col. 9, lines 45-49); sending print task modification commands to said print processor (S3, Col. 5, lines 34-41); and modifying said print task with said print processor” (Col. 9, lines 50-60). Owa et al. does not expressly disclose “the method of claim 1 wherein said print task is journalled printer data” because Owa et al. does not specify a particular file type for print tasks. Onuma discloses a print task consisting of journalled printer data (EMF file, Col. 6, lines 9-15). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate the print task of Owa et al. as journalled printer data. One of ordinary skill in the art would have been motivated to do this because journalled printer data, or an EMF file, was a standard format available for print tasks at the time this invention was made.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter K. Huntsinger whose telephone number is (703)306-4088. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (703)308-7452. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PKH



PETER K. HUNTSINGER
PRIMARY EXAMINER